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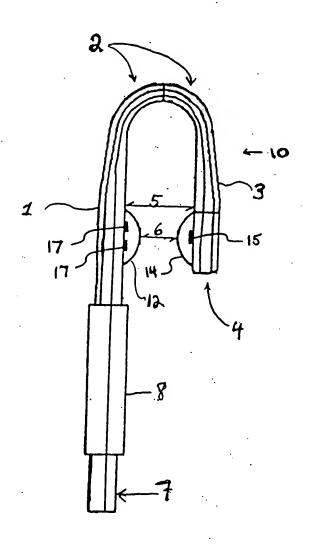
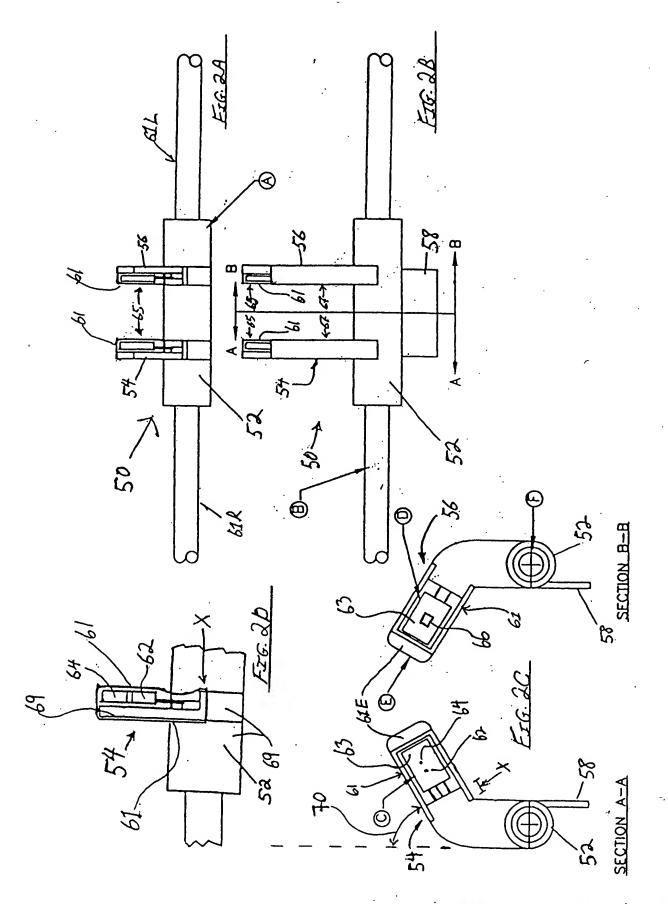


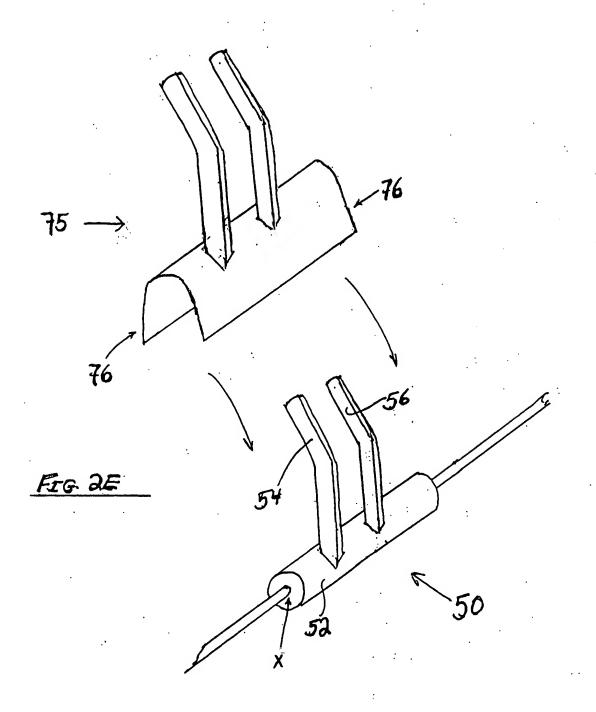
FIGURE 1

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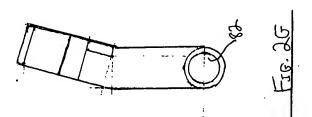


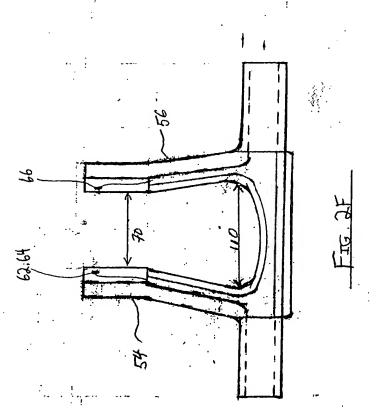
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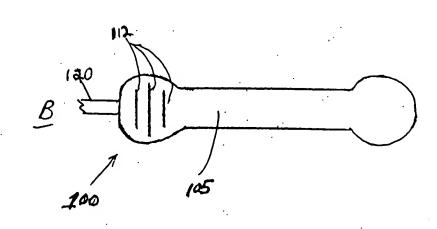
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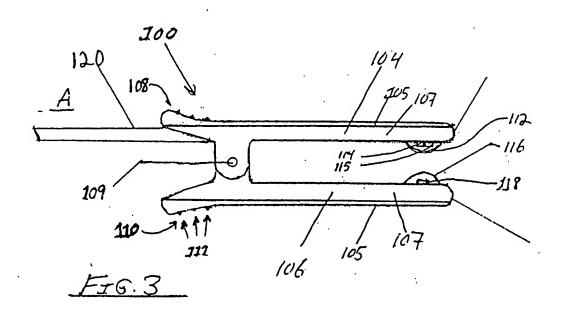




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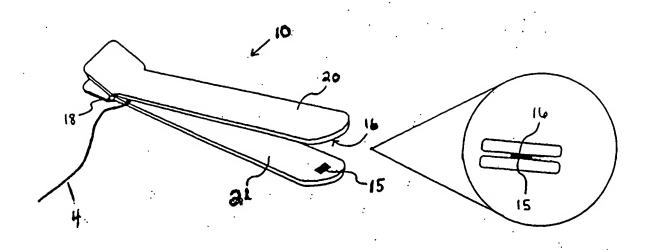


FIGURE 4

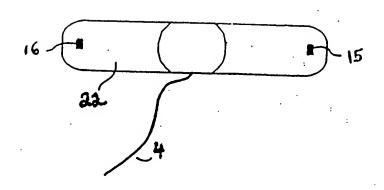


FIGURE 5

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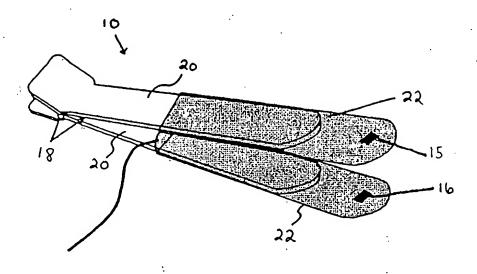


FIGURE 6

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A METHOD OF USING IDENTIFYING AND MONITORING VASCULAR PERFUSION/RESISTANCE

Removably affixing a first pulse oximeter probe to a central source site located in the head of a patient in need of the method.

Removably affixing a second pulse oximeter probe to a first peripheral/non-central site of interest on the patient.

Measuring signals from said central source site pulse oximeter and said first peripheral site pulse oximeter.

Averaging sufficient sequential signals from each site to obtain a statistically reliable average, and from said average calculating a time-set estimate of the arterial blood oxygen saturation, and repeating this averaging to obtain sequential time-set estimates from each site.

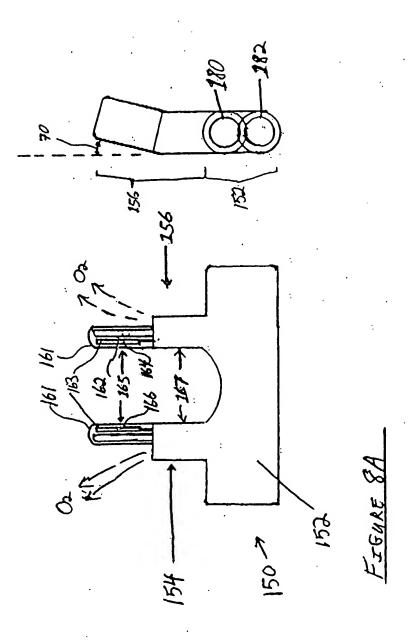
Comparing a time-set estimate of the arterial blood oxygen saturation from the central source site with an estimate, taken at a similar time, of the arterial blood oxygen saturation from the first peripheral site.

Determining the presence or absence of, or the time-based changes in, impaired peripheral perfusion proximal to said first peripheral site.

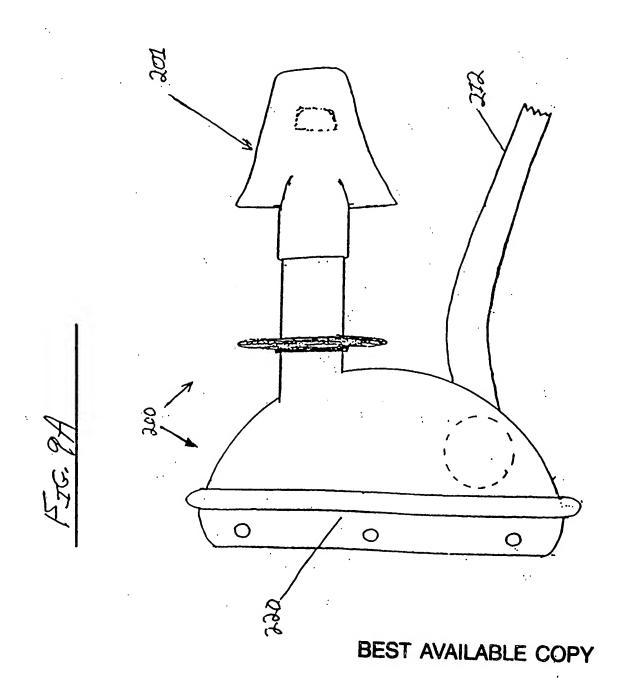
FIGURE 7

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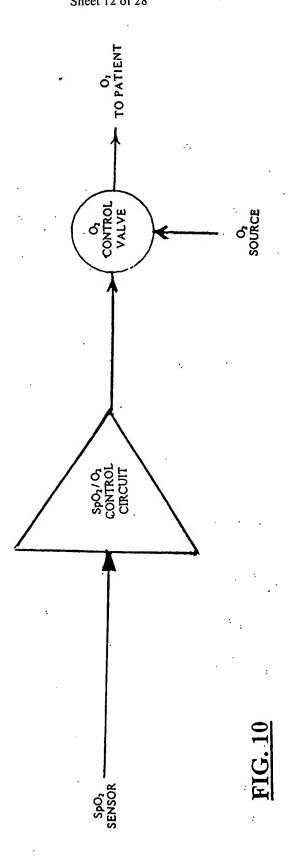


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FIG. 98

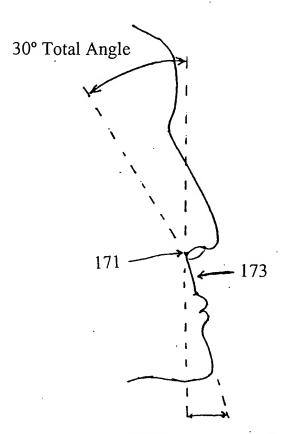
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Figure 11



15° Upper Lip Angle

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Figure 12A

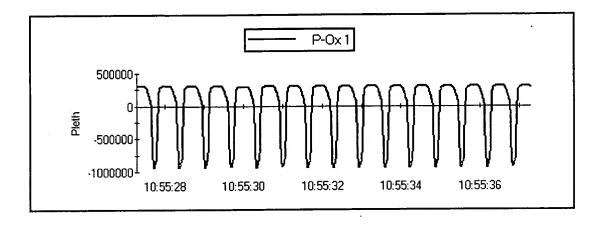
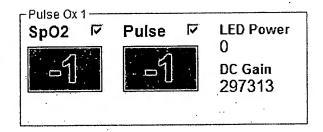


Figure 12B



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Figure 13A

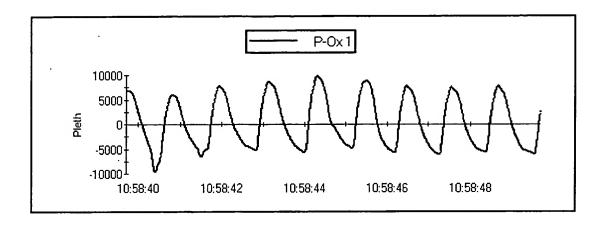
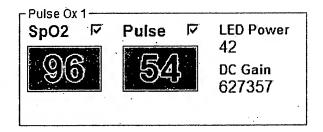


Figure 13B



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Figure 14A

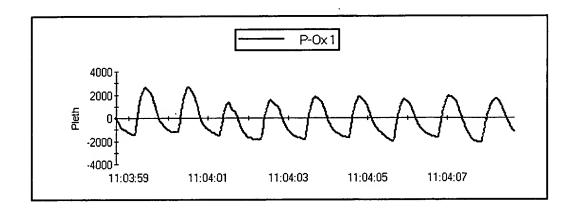
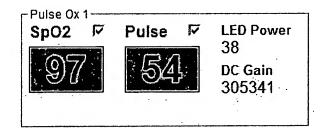


Figure 14B



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Figure 15A

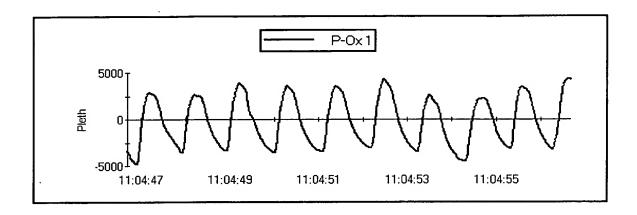
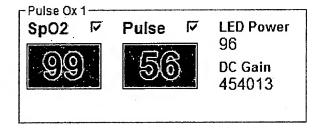


Figure 15B



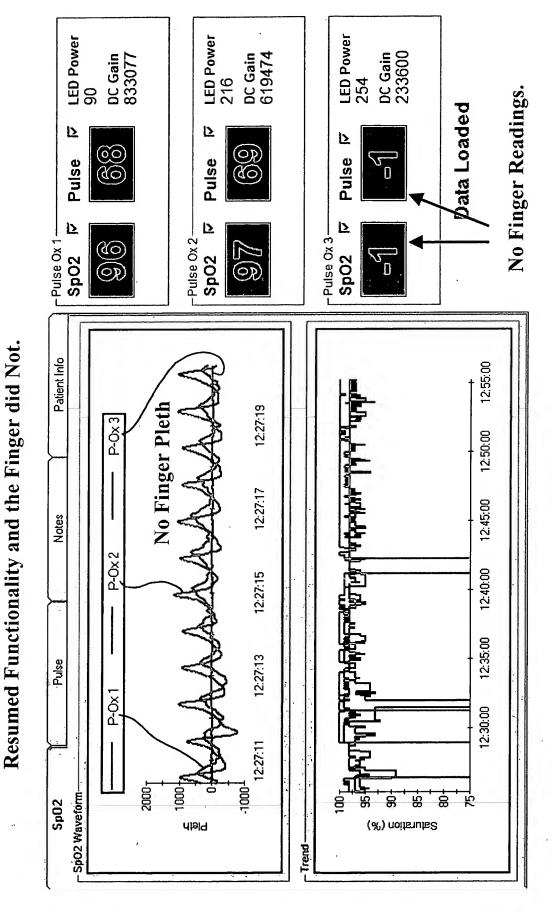
LED Power 100 LED Power 222 LED Pow 1 254 DC Gain 144206 DC Gain 587316 DC Gain 571901 Data Loaded 17 7 Pulse Puise Pulse 12 1 7 -Pulse Ox 1-Pulse Ox 3-Pulse Ox 2 Sp02 Sp02 Sp02 Everything is Normal at the Start of the Case Patient Info 10:00:00 09:47:49 P-0x3 09:55:00 09:47:47 Notes 09:50:00 P-0×2 09:47:45 09:45:00 09:47:43 Pulse 09:40:00 P,Ox1 09:35:00 09:47:41 -100001 100001 2000 8 8 ä - SpO2 Waveform 8 Sp02 (%) noitenuteS Pleth Trend

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Figure 16A

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After a Minute the Nasal and Cheek Probes

Figure 16B

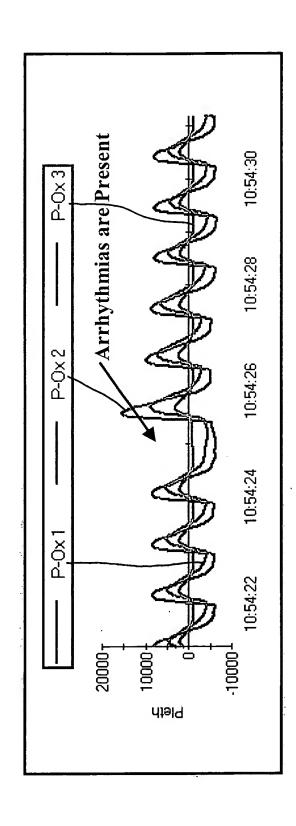
LED Power 90 LED Power 254 LED Power DC Gain 553320 DC Gain 677762 DC Gain 183107 Data Loaded 7 1 12 Pulse Puise Pulse 7 12 17 -Pulse Ox 1-Puíse Ox 3-Pulse Ox 2 Sp02 Sp02 Sp02 Patient Info 13:10:00 12:57:21 P-Ox3 13:05:00 12:57:19 Notes 13:00:00 P-0x2 12:57:17 12:55:00 12:57:15 12:50:00 Pulse P. Ox1 12:57:13 12:45:00 20000_{T} 10000 -100001-85-- Sp02 Waveform 8 75 ġ Sp02 (%) noitenuteS чын Trend

As the Case was Ending, Flow was Resumed and Everything

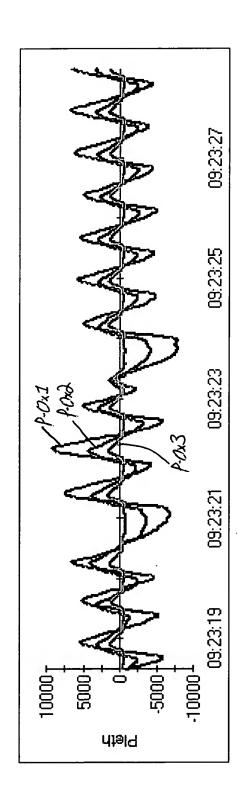
was Working Once Again.

Figure 16C

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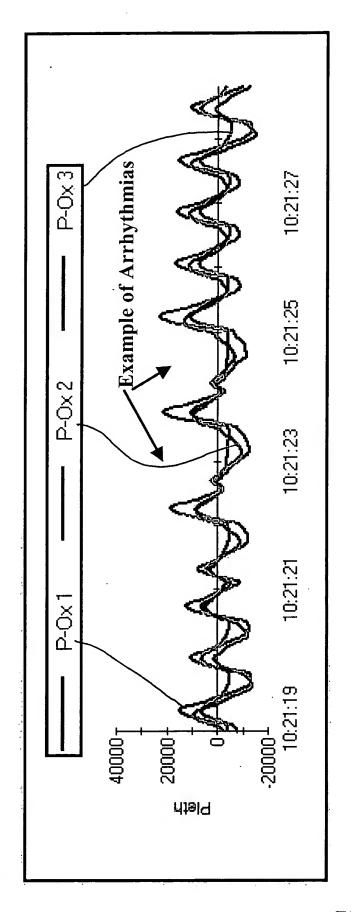
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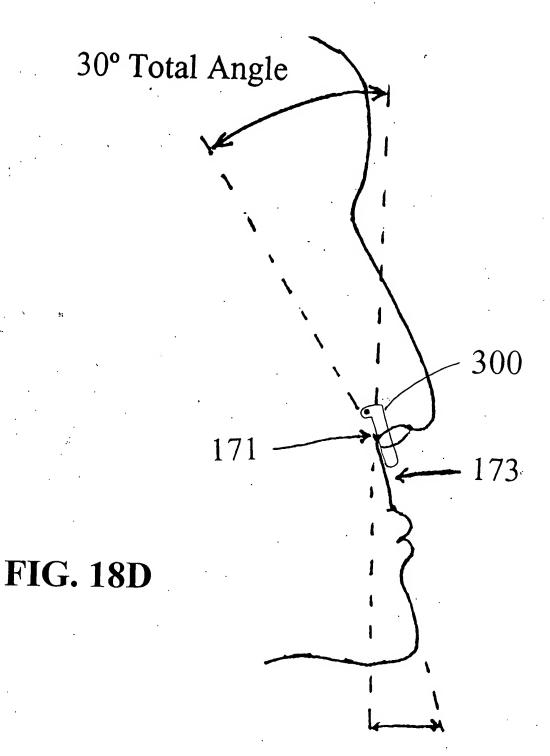




Docket No. 10457-042 Attorney: Joseph Fischer Phone: 407-926-7727 Sheet 24 of 28 Data, by itself Cross-septum Nasal Probe Cross-septum Nasal Probe Data 13:00:48 13:00:46 Cheek/Lip Probe Data 13:00:44 13:00:42 13:00:40 5000_{T} -5000-Pleth Finger Probe Data Figure 17D Comparison Event with: of Same

Docket No. 10457-042 Attorney: Joseph Fischer Phone: 407-926-7727 Sheet 25 of 28 Approx. 0 Degrees. Too inferior and posterior Approx. 30 Degrees. Too anterior and superior Approx. 15 Degrees. Over the Plexus Pulse 🕆 🗹 区 Pulse Spoz 11:02:05 11:02:54 11:03:39 11:02:52 11:02:03 11:03:37 P.Q.1 <u>Р</u> р У 11:03:35 11:02:01 11:02:50 11:02:48 11:01:59 11:03:33 10000T -5000 100001 10001-Pleth Pleth Pleth

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15° Upper Lip Angle

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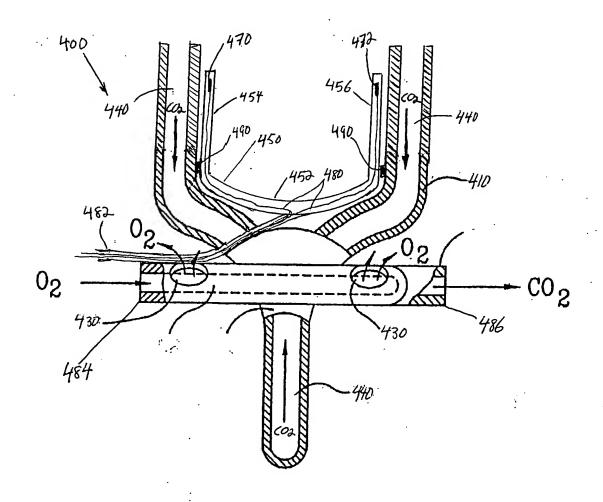


Figure 19A

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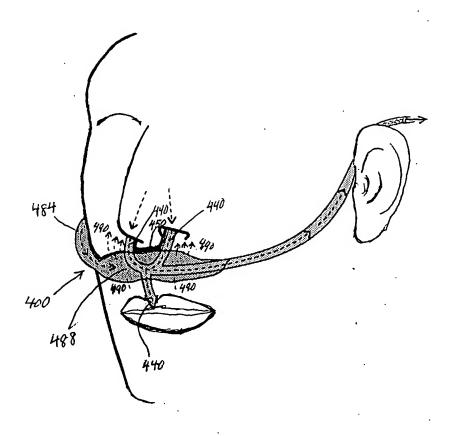


Figure 19B